

Amendments to the Claims:

1. (Cancelled)
2. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein the cell is a protist cell.
3. (Original) The dsRNA expression vector of claim 2, wherein the protist cell is a protozoan parasite cell.
4. (Original) The dsRNA expression vector of claim 2, wherein the protist cell is a Trypanosoma, Leishmania, Toxoplasma, or Plasmodium cell.

Claims 5 and 6 (Cancelled)

7. (Currently amended) ~~The dsRNA expression vector of claim 1~~ A double-stranded RNA (dsRNA) expression vector comprising:  
(a) a double-stranded designated DNA sequence of interest from a protist; and  
(b) a pair of promoters on opposite ends of the designated DNA sequence, wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, wherein the designated DNA sequence comprises is an essential gene, or a fragment thereof, from a protist.
8. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein the designated DNA sequence ~~comprises~~ is an essential gene, ~~or a fragment thereof~~, from a protozoan parasite.

9. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence ~~comprises~~ is an essential gene, ~~or a fragment thereof~~, from *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.
10. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence ~~comprises~~ is a gene, ~~or a fragment thereof~~, that is normally active during the protozoan's lifecycle when the protozoan is living in a mammalian host.
11. (Currently amended) The dsRNA expression vector of claim 8, wherein the designated DNA sequence comprises a gene, ~~or a fragment thereof~~, that is normally active during the protozoan's lifecycle when the protozoan is living in a mammalian host, but is not active during the protozoan's lifecycle when the protozoan is living in an insect host.
12. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein each of the pair of promoters is the same type of promoter.
13. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein each of the pair of promoters is a different type of promoter.
14. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is a eukaryotic, prokaryotic or viral promoter.
15. (Original) The dsRNA expression vector of claim 14, wherein at least one of the pair of promoters is a ribosomal RNA promoter, a *T. brucei* variant surface glycoprotein (VSG) gene promoter, or a procyclic acidic repetitive protein (PARP) gene promoter.

16. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is a bacteriophage T7 promoter, a bacteriophage T3 promoter, or an bacteriophage SP6 promoter.

17. (Currently amended) The dsRNA expression vector of claim [[1]] 7, wherein at least one of the pair of promoters is an inducible promoter.

18. (Currently amended) The dsRNA expression vector of claim 15, wherein the ribosomal RNA promoter is derived from *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.

Claim 19 (Cancelled)

20. (Currently amended) ~~The dsRNA expression vector of claim 19~~ A double-stranded RNA (dsRNA) expression vector comprising:

- (a) a double-stranded designated DNA sequence of interest obtained from a protist;
- (b) a pair of promoters on opposite ends of the designated DNA sequence wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, and
- (c) a vector backbone, wherein the backbone is a *Trypanosoma*, a *Leishmania*, a *Toxoplasma*, or a *Plasmodia* expression vector.

21. (Currently amended) The dsRNA expression vector of claim [[1]] 20, wherein the vector is effective in a protist.

22. (Original) The dsRNA expression vector of claim 21, wherein the protist is *Trypanosoma*, *Leishmania*, *Toxoplasma*, or *Plasmodia*.

23. (Currently amended) The dsRNA expression vector of claim [[1]] 20, further comprising sequences for integrating the vector into the genome of the cell.

24. (Currently amended) The dsRNA expression vector of claim [[1]] 7, further comprising an expression regulatory region.

25. (Original) The dsRNA expression vector of claim 24, wherein the regulatory region comprises a tetracycline operator sequence, a lactose operator sequence, a transcription termination sequence or another transcription regulatory element.

26. (Currently amended) A cell containing the dsRNA expression vector of claim [[1]] 7, 20 or 69.

27. (Previously presented) The cell of claim 26, wherein the vector is integrated into the genome of the cell.

28. (Previously presented) The cell of claim 26, wherein the dsRNA expression vector further comprises an expression regulatory region.

29. (Previously presented) The cell of claim 26, wherein at least one of the pair of promoters is an inducible promoter.

Claims 30-68 (Cancelled)

69. (New) A double-stranded RNA (dsRNA) expression vector comprising:

(a) a double-stranded designated DNA sequence of interest obtained from a protist;  
and

(b) a pair of promoters on opposite ends of the designated DNA sequence, wherein the promoters are oriented towards each other and wherein each is capable of initiating transcription of a strand of the double-stranded DNA sequence into RNA in a cell, wherein at least one of the pair of promoters is a ribosomal RNA promoter, a *T. brucei* variant surface glycoprotein (VSG) gene promoter, or a procyclic acidic repetitive protein (PARP) gene promoter.